

IMAGE LINKED WITH IMAGE PROCESSING STATION

ABSTRACT

5 A digital video camera is coupled with an image processing station by a tether that
has a bandwidth. The processing station has a memory with a program that executes
instructions. When application software on the station requests a driver on the station to
operate the camera at a specific frame rate, the program determines whether the requested
frame rate is higher than permitted by the tether bandwidth. If that is so, the program
10 computes a maximum permitted frame rate and an integration time of the pixels of the
camera. The integration time causes the camera to produce output video frames at a rate
commensurate with the computed bandwidth constrained frame rate, instead of the requested
frame rate. The program then adjusts the gain accordingly.